

Claims

1. An apparatus for producing plastic hollow bodies using a extrusion blow
5 molding process, comprising:

an extrusion unit, which has an extruder defining a longitudinal direction
of the apparatus, the extruder unit being mounted in a housing frame;

an extruder head connected to the extruder and having at least one
10 extrusion nozzle; and

at least one molding tool, which is provided with an opening disposed on
15 a side of the molding tool toward the extrusion nozzle, and which is movably
mounted along a lateral path extending essentially perpendicular to the
longitudinal direction from a terminal position laterally of the extruder head into
a position beneath the extruder head and back again, such that the extrusion
nozzle and the opening of the molding tool coincide vertically with one another,
the extrusion unit being vertically inclinable and laterally pivotable in the
housing by a pivotable support, and being mounted for displacement in the
longitudinal direction.

20 2. The apparatus of claim 1, wherein the pivotable support is provided in a
region of a center of gravity of the extrusion unit, in an end region of the
extruder remote from the extruder head.

25 3. The apparatus of claim 2, wherein the pivotable support is provided in a
region of a gear for the extruder .

4. The apparatus of claim 1, wherein the extrusion unit is supported on a carriage that is movable in the longitudinal direction.

5. The apparatus of claim 1, wherein a extruder head is pivotably
5 connected to the extruder.

6. The apparatus of claim 5, wherein the pivot connection of the extruder head to the extruder has two degrees of freedom.

10 7. The apparatus of claim 6, wherein the extruder head is retained in a frame part, and its position is adjustable vertically, in the longitudinal direction, and in a lateral direction transversely to the longitudinal direction.

8. The apparatus of claim 7, wherein for each adjustment option, adjusting
15 drive mechanisms are provided.

9. The apparatus of claim 8, wherein the adjusting drive mechanisms are triggerable via a central control unit, which cooperates with positioning aids that are disposed on the extruder head and/or on the blow molding table.

20

10. The apparatus of claim 9, wherein the sensors detect oscillations of the extruder head, and cooperate with the control unit.

11. The apparatus of claim 1, comprising:
25 two blow molding stations, whose blow molding tables are disposed in a T-shaped pattern to both sides of the extruder and are movable in alternation, along a lateral path extending essentially perpendicular to the longitudinal

direction, from a terminal position laterally of the extruder head to beneath the extruder head and back again, to make the extrusion nozzle and the openings of the molding tools coincide vertically with one another.

5 12. The apparatus of claim 1, wherein the extruder head has a plurality of extrusion nozzles, which can be supplied simultaneously with plastic material by the extruder, and each blow mold is embodied as a multiple tool with a plurality of cavities, and the number of cavities corresponds to the number of extrusion nozzles.

10

13. The apparatus of claim 3, wherein the extrusion unit is supported on a carriage that is movable in the longitudinal direction.

15

14. The apparatus of claim 13, wherein the extruder head is pivotably connected to the extruder.

15. The apparatus of claim 8, wherein the drive mechanisms are electric servo motors.

20

16. The apparatus of claim 10, wherein the sensors are acceleration sensors.

25

17. The apparatus of claim 14, comprising:
two blow molding stations, whose blow molding tables are disposed in a T-shaped pattern to both sides of the extruder and are movable in alternation, along a lateral path extending essentially perpendicular to the longitudinal direction, from a terminal position laterally of the extruder head to beneath the

extruder head and back again, to make the extrusion nozzle and the openings of the molding tools coincide vertically with one another.

- 5 18. The apparatus of claim 17, wherein the extruder head has a plurality of extrusion nozzles, which can be supplied simultaneously with plastic material by the extruder, and each blow mold is embodied as a multiple tool with a plurality of cavities, and the number of cavities corresponds to the number of extrusion nozzles.

10